

**APPARATUS AND METHOD FOR BUS POWER
MEASUREMENT IN A DIGITAL SIGNAL PROCESSOR**

This application claims the benefit of U.S. Provisional Application No.

- 5 60/299,016, filed June 18, 2001; and U.S. Provisional Application No. 60/299,023, filed
June 18, 2001.

Related U.S. Patent Application

- 10 U.S. Patent Application *No. 09/920193* ~~(Attorney Docket TI-33148)~~, entitled APPARATUS
AND METHOD FOR CENTRAL PROCESSING UNIT POWER MEASUREMENT IN
A DIGITAL SIGNAL PROCESSOR, invented by Gary L. Swoboda, filed on even date
herewith, and assigned to the assignee of the present application is a related application.

15 **Background of the Invention**

1. Field of the Invention

- 20 This invention relates generally to digital signal processing units and, more
particularly, to power consumption of the buses found in digital signal processor units.

2. Background of the Invention

- 25 The digital signal processor and related devices have found increasing application
in portable apparatus, such as cell phones, wireless internet devices, etc. The power
consumption is a critical parameter for portable apparatus. The power consumption
determines the size of the battery and the time between recharging the battery, key
parameters in the portability of devices.

- 30 However, the power consumption parameter has several variables. The hardware
implementing the device can, for example, be designed to run with minimum power